

AMENDMENTS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Currently amended) A compound that specifically inhibits the formation of the human C5b-9 complex, said compound comprising a peptidomimetic or a peptide of less than forty amino acid residues and having the structure and function of human CD59 amino acid residues 42-58 of SEQ ID NO:3, the peptidomimetic or peptide binding specifically to human C9 at amino acid residues 26-51 of SEQ ID NO:14.
- 2-3. (Canceled)
4. (Currently amended) The compound of claim 1, wherein the compound is a chimeric peptide which includes that comprises the amino acids 42 to 58 of the human sequence CD59 in SEQ ID NO:3.
5. (Previously presented) The compound of claim 1, wherein the compound is a covalently cyclized peptide comprising human CD59 amino acid residues 42 to 58 in SEQ ID NO:3.
6. (Currently amended) The compound of claim 1, wherein the compound is a peptide of less than forty amino acid residues including that comprises amino acid residues 42 to 58 of human CD59 in SEQ ID NO:3.
7. (Currently amended) A composition comprising a compound that specifically inhibits the formation of the human C5b-9 complex, said compound comprising a peptidomimetic or a peptide of less than forty amino acid residues and having the structure and function of human CD59 amino acid residues 42-58 of SEQ ID NO:3, the peptidomimetic or peptide binding specifically to amino acid residues 26 to 51 of human C9 in SEQ ID NO:14, and a pharmaceutically acceptable carrier for administration to patients in need thereof.

8. (Previously presented) The compound of claim 1, wherein the compound is a peptidomimetic compound comprising the side chains of human CD59 amino acid residues His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in an equivalent spatial orientation and alignment to that presented on the surface of human CD59.
9. (Previously presented) The compound of claim 8, wherein the spatial orientation and alignment of the side chains of His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in the compound are equivalent to the spatial orientation and alignment deduced by NMR structure determination.
10. (Currently amended) A method for inhibiting human C5b-9 complex assembly comprising administering an effective amount of a composition comprising a compound—a peptidomimetic or a peptide of less than forty amino acid residues and having the structure and function of human CD59 amino acid residues 42-58 in SEQ ID NO:3, the peptidomimetic or peptide binding specifically to human C9 at amino acid residues 26-51 of SEQ ID NO:14.

11-12. (Canceled)

13. (Currently amended) The method of claim 10, wherein the compound is a chimeric peptide which includes that comprises the amino acids 42 to 58 of the human sequence of CD59 in SEQ ID NO:3.
14. (Previously presented) The method of claim 10, wherein the compound is a covalently cyclized peptide comprising human CD59 amino acid residues 42 to 58 in SEQ ID NO:3.
15. (Currently amended) The method of claim 10, wherein the compound is a peptide of less than forty amino acids including that comprises amino acid residues 42 to 58 of human CD59 in SEQ ID NO:3.

16. (Original) The method of claim 10, wherein the composition further comprises a pharmaceutically acceptable carrier for administration to patients in need thereof.
17. (Previously presented) The method of claim 10, wherein the composition is administered to a patient in need of suppression of complement-mediated inflammation.
18. (Previously presented) The method of claim 10, wherein the compound is a peptidomimetic comprising the side chains of human CD59 amino acid residues His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in the spatial orientation and alignment of human CD59.
19. (Previously presented) The method of claim 18, wherein the spatial orientation and alignment of the side chains of His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in the compound are deduced by NMR structure determination.

20-35. (Canceled)

36. (New) The composition of claim 7, wherein the compound is a chimeric peptide that comprises the amino acids 42 to 58 of the human sequence CD59 in SEQ ID NO:3.
37. (New) The composition of claim 7, wherein the compound is a covalently cyclized peptide comprising human CD59 amino acid residues 42 to 58 in SEQ ID NO:3.
38. (New) The composition of claim 7, wherein the compound is a peptide that comprises amino acid residues 42 to 58 of human CD59 in SEQ ID NO:3.